Claims

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13. (new) A medical imaging device, comprising:

a radiation source;

a digital radiation detector for recording images, the radiation source and the digital radiation detector configured to be moved vertically relative to a patient in a standing position;

a control device adapted to move the radiation source and the digital radiation detector to a plurality of successive imaging positions for recording an image of an examination area exceeding an elevation level of an active surface area of the digital radiation detector; and

an image processing device for generating a combined image showing the whole examination area, wherein

the plurality of successive imaging positions are calculated by the control device based on an elevation level of the examination area and the elevation level of the active surface area of the digital radiation detector,

an image is recorded at each imaging position, the images recorded at the imaging positions in their entirety covering the whole examination area, and

the image processing device is configured to generate the combined image using the images recorded at the imaging positions.

- 14. (new) The medical imaging device according to claim 13, wherein the control device is adapted to move the radiation source and the digital radiation detector synchronously.
- 15. (new) The medical imaging device according to claim 13, wherein the control device is further adapted to move the radiation source and the digital radiation detector to the imaging positions successively using an automation program.

16. (new) The medical imaging device according to claims 13, wherein the images recorded at adjacent imaging positions overlap in an overlap area.

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- 17. (new) The medical imaging device according to claim 13, wherein the images recorded at adjacent imaging positions do not overlap.
- 18. (new) The medical imaging device according to claim 16, wherein the imaging processing device is further adapted to arrange the images recorded at the adjacent imaging positions relative to the combined image using the overlap area.
  - 19. (new) The medical imaging device according to claim 17, wherein the imaging processing device is further adapted to arrange the images recorded at the adjacent imaging positions relative to the combined image using a border area of the images.
  - 20. (new) The medical imaging device according to claims 13, wherein the combined image is displayed on a monitor or printed on a hardcopy.
- 21. (new) The medical imaging device according to claim 20, wherein the displayed or printed combined image is scaled down.
  - 22. (new) The medical imaging device according to claim 13, wherein the combined image is displayed on a monitor using a display format corresponding to a recording format of the combined image, the combined image movable on the monitor using a scrolling mechanism.
  - 23. (new) The medical imaging device according to claim 13, wherein the combined image is displayed on a monitor using a display format exceeding the original size of the examination area, the combined image movable on the monitor using a scrolling mechanism.
  - 24. (new) The medical imaging device according to claim 13, wherein the radiation source and the digital radiation detector are arranged on adjustable wall- or floor-mounted supports.
  - 25. (new) The medical imaging device according to claim 24, wherein the supports are telescopic supports.

- 26. (new) The medical imaging device according to claim 13, further comprising a platform for accommodating the patent, the platform having a safeguard device for securing the patient's standing position.
- 5 27. (new) The medical imaging device according to claim 26, wherein the safeguard device includes a handhold.
- 28. (new) The medical imaging device according to claim 26, further comprising a plate permeable for radiation emitted by the radiation source, the plate arranged on the platform and facing the digital radiation detector.